AP3 Rec'd PCT/PTO 25 JAN 2006

PTO-1390 (Rev. 07-2005) Approved for use through 03/31/2007. OMB 0651-0021

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TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

U.S. APPLICATION NO. (if known, see 37 CFR 1.5) **CONCERNING A SUBMISSION UNDER 35 U.S.C. 371** INTERNATIONAL FILING DATE INTERNATIONAL APPLICATION NO. PRIORITY DATE CLAIMED PCT/FR04/001439 9 June 2004 29 July 2003 TITLE OF INVENTION DEVICE FOR MIXING TWO FLUIDS AND USE THEREOF FOR COOLING A VERY HIGH TEMPERATURE FLUID APPLICANT(S) FOR DO/EO/US Michel Lepine et al. Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: This is a FIRST submission of items concerning a submission under 35 U.S.C. 371. This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371. This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must 3. X include items (5), (6), (9) and (21) indicated below. The US has been elected (Article 31). 5. X A copy of the International Application as filed (35 U.S.C. 371 (c)(2)) is attached hereto (required only if not communicated by the International Bureau). has been communicated by the International Bureau. C. is not required, as the application was filed in the United States Receiving Office (RO/US). 6. x An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). a. x is attached hereto. has been previously submitted under 35 U.S.C. 154(d)(4). Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) are attached hereto (required only if not communicated by the International Bureau). have been communicated by the International Bureau. have not been made; however, the time limit for making such amendments has NOT expired. have not been made and will not be made. An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). 9. An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). 10 Items 11 to 20 below concern document(s) or information included: An Information Disclosure Statement under 37 CFR 1.97 and 1.98. An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 12. 13 A preliminary amendment. An Application Data Sheet under 37 CFR 1.76. 14. x 15. A substitute specification. 16 A power of attorney and/or change of address letter. A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825. 17 A second copy of the published International Application under 35 U.S.C. 154(d)(4). 18 A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4). 19

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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. ERNATIONAL APPLICATION NO. ATTORNEY'S DOCKET NUMBER U.S. APPLICATION NO. PCT/FR04/001439 20513-00615-US1 Forms PCT/IB/304 and PCT/ISA/220; Return Receipt Postcard 20. x Other items or information: The following fees have been submitted **CALCULATIONS PTO USEONLY** \$ 21. x Basic national fee (37 CFR 1.492(a)) \$300 300.00 Examination fee (37 CFR 1.492(c)) 22. x If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)........ \$ 200.00 \$200 All other situations 23. x Search fee (37 CFR 1.492(b)) Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an 500.00 International Searching Authority\$100
International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB.................\$400 \$ 1,000.00 \$ TOTAL OF 21, 22 and 23 = Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof. **Total Sheets** Extra Sheets Number of each additional 50 or fraction RATE thereof (round up to a whole number) x \$250.00 \$ /50·= 27 - 100 = Surcharge of \$130 for furnishing any of the search fee, examination fee, or the oath or declaration \$ after the date of commencement of the national stage (37 CFR 1.492(h)). NUMBER FILED NUMBER EXTRA RATE 6 - 20 = 0.00 Total claims Independent claims 1 - 3 = x 0.00 MULTIPLE DEPENDENT CLAIM(S) (if applicable) 1,000.00 TOTAL OF ABOVE CALCULATIONS = Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2. SUBTOTAL = 1,000.00 Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)). TOTAL NATIONAL FEE = \$ 1,000.00 Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property + \$ \$ \$ TOTAL FEES ENCLOSED = 1,000.00 Amount to be \$ refunded: \$ charged

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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. to cover the above fees is enclosed. A check in the amount of \$ 22-0185 in the amount of \$ Please charge my Deposit Account No. to cover the above fees. A duplicate copy of this sheet is enclosed. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit 22-0185 A duplicate copy of this sheet is enclosed. Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038 NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed an granted to restore the International Application to pending status. SEND ALL CORRESPONDENCE TO: SIGNATURE **Morris Liss** NAME CUSTOMER NUMBER: 30678 REGISTRATION NUMBER

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IAP5 Rec'd PCT/PTO 25 JAN 2006

PTO/SB/17 (12-04v2)
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Under the Par	perwork Reduction	Act of 1995	no person are r	equired to	respond to a collection	n of Information	on unless it display	s a valid OMB o	control number.	
Effective on 12/08/2004.					Complete if Known					
Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).					7 (ppiloetieit i teitieei		lot Yet Assigned			
FEE TRANSMITTAL					Filing Date		Concurrently Herewith			
For FY 2005					Thet itemes with		Michel Lepine			
							Not Yet Assigned			
Applicant claims small entity status. See 37 CFR 1.27					Art Unit		N/A			
TOTAL AMOUNT OF PAYMENT (\$) 1,000.00					Attorney Docket No. 20513-006			051		
METHOD OF PAYMENT (check all that apply)										
Check Credit Card Money Order None Other (please identify):										
X Deposit Account Deposit Account Number: 22-0185 Deposit Account Name: Connolly Bove Lodge & Hutz LLP										
For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)										
X Charge fee(s) indicated below Charge fee(s) indicated below, except for the filling fee										
Charge any additional fee(s) or underpayment of fee(s) under 37 CFR 1.16 and 1.17										
FEE CALCUL										
	G, SEARCH, AI	ND EXAM	INATION FE	ES						
			G FEES	SE	ARCH FEES	EXAMIN	IATION FEES			
Application Ty	vne F	ee (\$)	Small Entity Fee (\$)	Fee (\$	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fees P	aid (\$)	
Utility	<u>, po</u>	300	150	500	250	200	100			
Design		200	100	100	50	130	65			
Plant		200	100	300	150	160	80			
Reissue		300	150	500	250	600	300			
Provisional		200	100	0	0	0.0	0			
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2. EXCESS CLAIM FEES Fee Description								Fee (\$)	Fee (\$)	
Each claim over 20 (including Reissues)								50	25	
Each independent claim over 3 (including Reissues)								200	100	
Multiple dependent claims								360	180	
Total Claims Extra Claims Fee (\$) Fee Paid (\$) Multiple Depen								ent Claims		
6 -20 = x = =						Fe	e (\$)	Fee Paid (\$	1	
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Indep. Claims	Extra Clai		ee (\$)	Fee	Paid (\$)	-				
3. APPLICATIO	-3 =	^ -								
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	•				37 CFR 1.16(s).		4 Eon (A)	Eac !	Paid (\$)	
Total Sheet 27	<u>Extra</u> - 100 =	Sheets .	/50	of each a	dditional 50 or frag			=		
4. OTHER FEE	 (S)						. –	Fees	Paid (\$)	
Non-English Specification, \$130 fee (no small entity discount) 1631 Basic National Stage fee 300.00									n nn '	
Other (e.g., late filing surcharge): 1631 Basic National Stage fee 1633 National Stage Examination Fee - all other									200.00	
					Search Fee - all				0.00	
SUBMITTED BY	- 1									
Signature	Wo	22	~ \	48	Registration No. (Attomey/Agent)	24,510	Telephone	(202) 33	1-7111	
Name (Print/Tyne)	Morris (iss				,		Date	January 2	25, 2006	